

Appendix C - Fish Tissue Data Reporting Guidance

Notes: Texas Commission on Environmental Quality (TCEQ) staff collecting Surface Water Quality Monitoring water, sediment, fish tissue, and metals in water samples are to complete separate Request for Analysis forms (RFAs) for each sample. Separate RFAs are needed for each species of fish. Only TCEQ staff use the RFA form. Special projects may have different forms and data reporting procedures.

Refer to Chapter 7 of the Surface Water Quality Monitoring Procedures, Volume 1 (SWQM-V1) (1) for detailed information concerning Monitoring Components for Background Conditions, Long-Term Trends, Ecosystem Health, and Human Health Risk. Prior to sample collection the sample collector should review the section on “Monitoring Components” and submit a Monitoring Project Description Form (MPDF). This section provides information on where to sample, the type of sample to collect, the proper number of species, the number of individuals, the size of individuals, the sampling frequency, and example species. This information is summarized in Table 7-2. Quick Reference Guide-Procedures for Collecting Fish Tissue, located in Chapter 7 of the SWQM-V1, page 7-11.

Tissue Samples - Recording Data on the RFA

Metadata

Using SWQMIS, the collector will complete the metadata area on the upper front of the RFA. Following sample collection, the collector will complete the Composite Sample section.

Composite Sample

The front of the RFA has a section for composite samples. This section refers to the method of collection. Therefore, fish tissue collection will always be Composite (e.g., time and space when electrofishing), not Grab. Start Date, Start Time, Start Depth, End Date, End Time, End Depth, Composite Category, and Composite Type are all required fields for composite samples. Start Depth and End Depth are measured from the water surface. Start depth refers to the shallowest depth encountered while collecting the sample and end depth refers to the greatest depth encountered while collecting the sample. Use meters, not feet, for the depth units of measure. The Composite Category will be B signifying both space and time. The Composite Type will be equal to the number of individuals in the sample and should be the same number of individuals recorded on the lower back of the RFA. Category and Type are required fields for composite samples.

Additional RFA Data Recording

The collector will complete the area on the lower back of the RFA labeled Tissue. This area of the RFA has options for the tissue type or portion of the fish to be submitted to the laboratory (parameter code 74995). Circle either whole fish or fillet, or refer to a more extensive list of anatomical (tissue type) codes located in the Data Management Reference Guide (DMRG), Chapter 6. Fields are provided for three other criteria: Species, EPA Species Code (parameter code 74990), and # of individuals (parameter code 81614). Refer to the DMRG, Chapter 6, Commonly Used Parameter Codes, for the various Texas Species parameter codes. Record the number of individuals in the sample. This number must agree with that recorded in Composite Type. Finally, circle the desired suite of analysis to be conducted on the sample. Options are metals, pesticides, or semivolatile organics.

Tissue Samples - Reporting Required Data

TCEQ data collectors with data entry access to SWQMIS will report the data recorded on the RFA along with the information presented in the following table unless otherwise instructed in a specific project's QAPP or MPDF. TCEQ data collectors will report this data through the SWQMIS sample set and result data entry system just like other field data. Once in the SWQMIS Sampling module, locate the sample event and input the Fish Tissue Results. Select Tissue Sample Metadata for the Data Entry Type. If data management functions are being performed by a contracting entity (primarily CRP/TMDL/NPS contractors, SWQM contractors, or other state agencies such as the Texas Department of State Health Services (TDSHS) or the Texas Parks and Wildlife Department (TPWD) that do not have access to the SWQMIS data entry system), the data will be reported through the use of ASCII pipe delimited file formats found in Chapter 7 of the SWQM DMRG. See the table below for a partial list of fish tissue parameter codes.

Common Fish Tissue Specimen Parameters

Parameter Code	What to Enter	Reference
5-Digit, Texas Species Code	Number of individuals	Sample collected, and DMRG, Chapter 6
74990	EPA Species Code	DMRG, Chapter 6
74995	Anatomical Part Code	DMRG, Chapter 6
81614	Number of individuals in tissue sample	Sample collected
81615	Number of species in tissue sample	Always use one species in a tissue sample, value=1
00039	Length in millimeters (if one fish)	Sample collected
00019	Weight in grams (if one fish)	Sample collected
84100	Sex of sample	1=male, 2=female, 3=mixed, 4=unknown

Tissue Samples - Completing the Fish Collection Reporting Form

The Fish Collection Reporting Form is used by TCEQ staff to report fish collection activities to SWQM-Central Office (SWQM-CO) staff. The Fish Collection Reporting Form is located in Chapter 7 of the SWQM-V1 (Figure 7.1, page 7-12). Fish tissue collection events conducted within each region are compiled and reported annually to SWQM-CO. SWQM-CO will tally and submit the information to TPWD to fulfill the scientific collection permit requirements. Refer to the Fish Collection Reporting Form for guidance on reporting data for the TPWD Permit Requirements.